STAT

BC-3 BATTERY CHARGER

A. INTRODUCTION

1. The BC-3 operates from any AC mains source between 75 and 255 volts and is designed to charge a 12-volt battery.

2. To fully charge a discharged battery, the following charging time is required:

a.	BS/A-3 battery:	15 hours
b.	BS/B-3 battery:	24 hours
c.	Other batteries:	3 multiplied by the ampere-hour capacity of the battery. For a 12-volt car battery rated at 30 ampere-hours, charge for 90 hours. (3 times 30 equals 90 hours).

3. If a battery has been used only a short while, the battery may be recharged to bring it up to full charge by charging the battery for 10 minutes for every minute it has been used. The minutes of use should be counted from the time the transmitter was turned on until the time at which it is finally turned off. Operating only the receiver will take very little power from a BS-3 or larger battery.

B. PREPARING FOR OPERATION

1. Turn the switch to OFF.

2. Open cover and pull wires out.

3. Connect the RED clip to the positive terminal of the battery (marked P or + and colored RED).

4. Connect the BLACK clip to the negative terminal of the battery (marked N or - and colored BLACK).

5. Plug the black mains cord into any power outlet delivering from 75 to 255 volts AC. If the plug does not fit the outlet, unscrew the two pins at the end of the plug, take them out, turn them over and screw them back into the plug.

6. A circuit breaker is located inside the cover where the wires are stored. It looks like a switch and is marked ON and OFF. It must be turned ON.

C. OPERATION

1. After completing the above 6 steps, turn the switch on the front of the charger to the RIGHT (clockwise, in the direction of the arrow) one step at a time. If the meter (above the switch) points to YELLOW, continue turning the switch to the RIGHT until the meter needle points to GREEN. If the needle points to RED, turn the switch to the LEFT (counter-clockwise) until the needle points to the GREEN area.

2. If the charger is overloaded, the circuit breaker will turn itself OFF. If this occurs, it may be due to one of the following causes:

a. The BLACK and RED clips may be shorted together, or may be touching a metal battery case.

b. The BLACK and RED clips may not be connected to the correct terminals of the battery. Recheck steps 3 and 4 above.

c. The switch may be turned too far to the RIGHT. Turn it one step to the LEFT. If the meter reads at the top of the GREEN area and very near the RED area, the circuit breaker might turn itself off after a few minutes of charging. If this occurs, turn the switch one step to the LEFT so that the meter needle points to the lower part of the GREEN area, closer to the YELLOW area.

d. After checking for correct connections and correct setting of the switch, the circuit breaker switch must be turned ON before the charger will operate.

3. A completely discharged battery may cause the circuit breaker to operate even at the highest voltage setting of the power switch. If this happens it will be necessary to reset the circuit breaker several times until the battery voltage builds up enough for the circuit breaker to hold in. If the meter reading does not fall back into the green area after 30 minutes, turn the power switch to OFF and allow the charger to cool before resuming charging. As charging progresses, adjust the power switch to keep the meter indicating in the green.

Figure 1. BC-3 Battery Charger.

1. AC Mains Plug.
2. Red (+) and Black (-) Battery Clips.
3. Circuit Breaker Location.
4. AC Voltage Meter.
5. AC Power Switch.